

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) An exhaust emission control apparatus of an internal combustion engine in which combustion is continuously performed at a lean air/fuel ratio, the exhaust emission control apparatus comprising:

a NO_x catalyst provided in a looped exhaust passage of the internal combustion engine for storing NO_x contained in an exhaust gas at a lean air/fuel ratio flowing into the exhaust passage, and reducing the stored NO_x in the presence of a reducing agent in the exhaust gas when the air/fuel ratio of the exhaust gas is lowered, a flow direction of the exhaust gas being reversed within the exhaust passage under predetermined conditions,

a reducing agent supply valve that is provided in the exhaust passage upstream of the NO_x catalyst, through which the reducing agent is supplied to the NO_x catalyst,

an exhaust state detector that detects a state of the exhaust gas flowing through the NO_x catalyst, and

a controller that executes (1) a reducing agent supply control by temporarily decreasing the flow rate of the exhaust gas and supplying the reducing agent from the reducing agent supply valve and (2) a correction control to correct a control parameter used in the reducing agent supply control in accordance with an exhaust state value that is obtained from an output of the exhaust state detector after the reducing agent has been supplied from the reducing agent supply valve, wherein, during the correction control, the controller determines a time period elapsing from a predetermined reference timing until the exhaust state value reaches a peak after the supply of the reducing agent from the reducing agent supply valve, and corrects the control parameter such that the time period equals a target time period.

2. (Previously Presented) The exhaust emission control apparatus according to claim 1, wherein the exhaust state value comprises at least one of an oxygen concentration of the exhaust gas, a temperature of the exhaust gas, a NO_x concentration of the exhaust gas, and a reducing agent concentration of the exhaust gas.

3. (Previously Presented) The exhaust emission control apparatus according to claim 1, wherein, during the correction control, the controller compares the exhaust state value with a target exhaust state value and corrects the control parameter so as to bring the exhaust state value to the target exhaust state value.

4. (Previously Presented) The exhaust emission control apparatus according to claim 2, wherein the target exhaust state value corresponds to at least one of a maximum value of the exhaust state value and a minimum value of the exhaust state value.

5. (Cancelled)

6. (Previously Presented) The exhaust emission control apparatus according to claim 1, wherein, before or after the reducing agent supply control, the controller executes a reducing agent amount correction by supplying a target amount of the reducing agent from the reducing agent supply valve, and correcting a value of the target amount based on an output of the exhaust state sensor that is obtained after the target amount of the reducing agent has been supplied.

7. (Previously Presented) The exhaust emission control apparatus according to claim 1, wherein the temporal decrease in the flow rate of the exhaust gas is accomplished by continuously changing the flow rate of the exhaust gas.

8. (Previously Presented) The exhaust emission control apparatus according to claim 1, wherein the temporal decrease in the flow rate of the exhaust gas is accomplished by holding the flow rate of the exhaust gas at a particular rate.

9. (Previously Presented) The exhaust emission control apparatus according to claim 1, wherein the controller controls a length of a time period to supply the reducing agent from the reducing agent supply valve on the basis of the exhaust state value.

10. (Currently Amended) An exhaust emission control method of an internal combustion engine in which combustion is continuously performed at a lean air/fuel ratio, and a NO_x catalyst is provided in an exhaust passage of the internal combustion engine for storing NO_x contained in a looped exhaust gas at a lean air/fuel ratio flowing into the exhaust passage, and reducing the stored NO_x in the presence of a reducing agent in the exhaust gas when the air/fuel ratio of the exhaust gas is lowered, a flow direction of the exhaust gas being reversed within the exhaust passage under predetermined conditions, a reducing agent supply valve is provided in the exhaust passage upstream of the NO_x catalyst, through which the reducing agent is supplied to the NO_x catalyst, and an exhaust state detector that detects a state of the exhaust gas flowing through the NO_x catalyst, the exhaust emission control method comprising:

executing (1) a reducing agent supply control by temporarily decreasing the flow rate of the exhaust gas and supplying the reducing agent from the reducing agent supply valve and (2) a correction control to correct a control parameter used in the reducing agent supply control in accordance with an exhaust state value that is obtained from an output of the exhaust state detector after the reducing agent has been supplied from the reducing agent supply valve, wherein, during the correction control, a time period elapsing is determined from a predetermined reference timing until the exhaust gas value reaches a peak after the supply of the reducing agent from the reducing agent supply valve with a target time period, and the control parameter is corrected such that the time period equals a target time period.

11. (Previously Presented) The exhaust emission control method according to claim 10, wherein at least one of an oxygen concentration of the exhaust gas, a temperature of the

exhaust gas, a NO_x concentration of the exhaust gas, and a reducing agent concentration of the exhaust gas is detected as the exhaust state value.

12. (Previously Presented) The exhaust emission control method according to claim 10, wherein, during the correction control, the exhaust state value is compared with a target exhaust state value and the control parameter is corrected so as to bring the exhaust state value to the target exhaust state value.

13. (Previously Presented) The exhaust emission control method according to claim 11, wherein the target exhaust state value corresponds to at least one of a maximum value of the exhaust state value and a minimum value of the exhaust state value.

14. (Cancelled)

15. (Previously Presented) The exhaust emission control method according to claim 10, wherein, before or after the reducing agent supply control, a reducing agent amount correction is executed by supplying a target amount of the reducing agent from the reducing agent supply valve, and a value of the target amount is corrected based on an output of the exhaust state sensor that is obtained after the target amount of the reducing agent has been supplied.

16. (Previously Presented) The exhaust emission control method according to claim 10, wherein the temporal decrease in the flow rate of the exhaust gas is accomplished by continuously changing the flow rate of the exhaust gas.

17. (Previously Presented) The exhaust emission control method according to claim 10, wherein the temporal decrease in the flow rate of the exhaust gas is accomplished by holding the flow rate of the exhaust gas at a particular rate.

18. (Previously Presented) The exhaust emission control method according to claim 10, wherein a length of a time period taken to supply the reducing agent from the reducing agent supply valve is controlled on the basis of the exhaust value.